

REMARKS

Claims 4 and 5 are objected to as being dependent on canceled claim 2. Claims 4 and 5 are amended to be dependent on claim 1 such that the objections to claims 4 and 5 are believed to be overcome. Accordingly, reconsideration of the objections is respectfully requested.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyazaki (United States Publication No. 2002/0154080). In view of the amendments to the claims and the following remarks, it is believed that the amended claims are allowable over the cited reference.

Independent claims 1 and 10 are amended herein to clarify that a first switch (for example, first switch 251 shown in Figure 2 of the present specification) of a liquid crystal display driver connects one end of a second capacitor (for example, the top end of second capacitor C6), in a first position of the first switch 251, to a first output terminal (for example, the output terminal from which a first driving voltage V0 is output), and connects the one end of the second capacitor C6, in a second position of the first switch 251, to a fifth output terminal (for example, the output terminal from which a fifth driving voltage V4 is output) in response to a driving polarity signal CON. In addition, claim 1 is amended herein to clarify that a second switch (for example, second switch 252 shown in Figure 2 of the present specification) connects the other end of the second capacitor (for example, the bottom end of second capacitor C6), in a first position of the second switch 252, to a second output terminal (for example, the output terminal from which second driving voltage V1 is output) and connects the other end of the second capacitor C6, in a second position of the second switch 252, to a ground voltage (for example, ground voltage VSS) in response to the driving polarity signal CON. In addition, claim 1 is amended herein to clarify that a third switch (for example, third switch 253 shown in Figure 2 of the present specification) connects one end of a third capacitor (for example, the top end of third capacitor C7), in a first position of a third switch, to the second output terminal V1, and connects the one end of the third capacitor C7, in a second position of the third switch 253, to a fourth output terminal (for example, the output terminal from which a fourth driving voltage V3 is output) in response to the driving polarity signal CON. In addition, claim 1 is amended herein to clarify that a fourth switch (for example, fourth switch 254 shown in Figure 2 of the present specification) connects the other end of the third capacitor (for example, the bottom end of third

Application Number 10/649,557
Amendment dated February 26, 2007
Reply to Office Action of November 30, 2006

capacitor C7) in a first position of the fourth switch 254 to a third output terminal (for example, the output terminal from which a third driving voltage V3 is output) and connects the other end of the third capacitor C7, in a second position of the fourth switch 254, to the fifth output terminal V4 in response to the driving polarity signal CON.

With regard to the rejection of independent claims 1 and 10, it is submitted that Miyazaki fails to teach or suggest a first switch for connecting one end of a second capacitor, in a first position of the first switch, to a first output terminal and connecting the one end of the second capacitor, in a second position of the first switch, to a fifth output terminal in response to a driving polarity signal, as claimed in amended independent claims 1 and 10. Instead, Miyazaki discloses a switch SW3 that connects one end (i.e., right end) of a capacitor C4 to ground when the switch SW3 is in a first position “a” (see Miyazaki, Figure 8). The switch SW3 of Miyazaki also connects the right end of the capacitor C4 to a first voltage level V1 when the switch SW3 is in a second position “b” (see Miyazaki, Figure 8). This position was presented in Applicant’s Amendment After Final Rejection filed on September 11, 2006. Specifically, as described in the Applicant’s Amendment After Final Rejection, the switch SW3 of Miyazaki switches between ground in a first position and the first voltage level V1 in a second position. More specifically, the right end of capacitor C4 of Miyazaki is either connected to ground or the first voltage level V1, depending on the position of the switch SW3. Miyazaki as illustrated in Figure 8 is therefore different than Applicant’s claimed invention, in which one end of a second capacitor (for example, second capacitor C6) is connected to either a first output terminal (for example, the output terminal from which first driving voltage V0 is output) or a fifth output terminal (for example, the output terminal from which fifth driving voltage V4 is output), depending on the position of the first switch 251.

Applicant notes that the Office Action at page 9, first paragraph, and page 8, last paragraph, refers to switch SW3 of Miyazaki as being a first switch for connecting the right end of the second capacitor C4 in a first position of the first switch SW3b to one of a first output terminal V1 and a fifth output terminal V5. Although the right end of the capacitor C4 of Miyazaki is connected to a voltage level V1 when switch SW3 is in position “b”, there is no teaching or suggestion of the one end of the capacitor C4 of Miyazaki, that is, the right end of capacitor C4, being connected to a fifth output terminal when the switch SW3 is in position “a.”

Instead, as described above, the right end of capacitor C4 of Miyazaki is coupled to either voltage level V1 or ground, depending on the position of the switch SW3. Applicants note that the other end of capacitor C4 of Miyazaki, that is, the left end of capacitor C4, is coupled to a terminal shared by voltage levels V5 and V2, and is coupled to switch SW2, regardless of the switch position of switch SW3 (see Miyazaki, Figure 8). It therefore follows that the switch SW3 of Miyazaki is different than Applicants' first switch, as claimed in claims 1 and 10, because switch SW3 of Miyazaki does not connect one end of a second capacitor, i.e., right end of capacitor C4 of Miyazaki, to a first output terminal V1 in a first position of the switch SW3, and to a fifth output terminal V5 in a second position of the switch SW3.

In addition, it is submitted that Miyazaki fails to teach or suggest a second switch for connecting the other end of a second capacitor, in a first position of the second switch, to the second output terminal and connecting the other end of the second capacitor, in a second position of the second switch, to a ground voltage in response to a driving polarity signal, as claimed in claims 1 and 10. Instead, as noted above, in Miyazaki, the other end of capacitor C4, i.e., the left end of capacitor C4, is connected to a terminal shared by voltage levels V2, V5 (see Miyazaki, Figure 8). There is no teaching or suggestion of the switch SW2 of Miyazaki (referred to in the Office Action as a second switch) connecting the left end of capacitor C4 to a second output terminal when the switch SW2 is in a first position, and connecting the left end of capacitor C4 to a ground voltage when the switch SW2 is in a second position. It follows that the switch SW2 of Miyazaki is different than Applicants' claimed second switch, because switch SW2 of Miyazaki does not connect the other end of a second capacitor, i.e., the left end of capacitor C4 of Miyazaki, to a second output terminal in a first position of the switch SW2, and to a ground voltage in a second position of the switch SW2.

In addition, it is submitted that Miyazaki fails to teach or suggest a third switch for connecting one end of a third capacitor, in a first position of the third switch, to a second output terminal and connecting the one end of the third capacitor, in a second position of the third switch, to a fourth output terminal in response to a driving polarity signal, as claimed in claims 1 and 10. Instead, Miyazaki discloses a capacitor C3 (referred to in the Office Action at page 3, section 6 as a third capacitor) having a right end that is connected to a shared terminal V5(V2), regardless of the position of switch SW1 (referred to in the Office Action as a third switch) (see

Miyazaki, Figure 8). There is no teaching or suggestion of the switch SW1 of Miyazaki connecting the right end of capacitor C3 to a second output terminal when the switch SW1 is in a first position, and connecting the right end of capacitor C3 to a fourth output terminal when the switch SW2 is in a second position.

It follows that the switch SW1 of Miyazaki is different than Applicants' claimed third switch, because the switch SW1 of Miyazaki does not connect one end of a third capacitor, i.e., right end of capacitor C3 of Miyazaki, to a second output terminal, in a first position of the switch SW1, and to a fourth output terminal, in a second position of the switch SW1.

In addition, it is submitted that Miyazaki fails to teach or suggest a fourth switch for connecting the other end of a third capacitor, in a first position of the fourth switch, to a third output terminal and connecting the other end of the third capacitor, in a second position of the fourth switch, to a fifth output terminal in response to the driving polarity signal, as claimed in amended independent claims 1 and 10. Applicants note that the Office Action at page 4, fourth paragraph refers to a fourth switch SW2 for connecting a left end of a third capacitor in a first position of the fourth switch SW2a to a third output terminal V3. However, contrary to assertions made in the Office Action, there is no teaching or suggestion of the switch SW2 of Miyazaki being a fourth switch for connecting the other end of a third capacitor, i.e., left end of capacitor C3, in a first position of the fourth switch, to a third output terminal and connecting the other end of the third capacitor in a second position of the fourth switch, to a fifth output terminal in response to the driving polarity signal, as claimed in amended independent claims 1 and 10. Specifically, switch SW2 of Miyazaki is different than Applicants' claimed fourth switch, since switch SW2 of Miyazaki does not connect the other end, i.e., left end, of capacitor C3 to a third output terminal or a fifth output terminal, depending on a first or second position of the switch SW2. Instead, the left end of capacitor C3 of Miyazaki is connected to either voltage level V3 or V4, depending on the position of switch SW1, which is referred to in the Office Action as a third switch, as distinguished from a fourth switch.

In addition, switch SW1 is likewise not Applicants' claimed fourth switch. Instead, when switch SW1 is at position "a", i.e., a first position, the left end of capacitor C3 is connected to voltage level V4, as distinguished from a third output terminal. When switch SW1 is at position "b", i.e. a second position, the left end of capacitor C3 is connected to voltage level V3, as

• Application Number 10/649,557
Amendment dated February 26, 2007
Reply to Office Action of November 30, 2006

distinguished from a fifth output terminal, as claimed in claims 1 and 10. Thus, the left end of capacitor C3 of Miyazaki is connected to either the third voltage level V3 or fourth voltage level V4 depending on the position of switch SW1, which is different than the present invention, in which the other end of a third capacitor is connected to either a third output terminal or a fifth output terminal, depending on the position of a fourth switch.

In view of the foregoing, it follows that neither switch SW1 nor switch SW2 of Miyazaki is analogous to Applicants' claimed fourth switch. Specifically, neither switch SW1 nor switch SW2 of Miyazaki connects the other end of the third capacitor, i.e., the left end of capacitor C3, to a third output terminal, in a first position of the switch SW1/SW2, and to a fifth output terminal, in a second position of the switch SW1/SW2.

With regard to independent claim 18, it is submitted that Miyazaki fails to teach or suggest a method for stabilizing voltages in a liquid crystal display comprising connecting one end of a second capacitor to a fifth output terminal by a first switch in a first position of the first switch, and further fails to teach or suggest connecting the other end of the second capacitor to the ground voltage by a second switch in a first position of the second switch, when a driving polarity signal is in a first logic state, as claimed in claim 18, for reasons similar to those described above with regard to claims 1 and 10.

In addition, it is submitted that Miyazaki fails to teach or suggest a method comprising connecting one end of a third capacitor to a fourth output terminal by a third switch in a first position of the third switch, and further fails to teach or suggest connecting the other end of the third capacitor to a fifth output terminal by a fourth switch in a first position of the fourth switch, when the driving polarity signal is in a first logic state, as claimed in claim 18, for reasons similar to those described above with regard to claims 1 and 10.

In addition, it is submitted that Miyazaki fails to teach or suggest a method comprising connecting one end of a second capacitor to a first output terminal by a first switch in a second position of the first switch, and further fails to teach or suggest connecting the other end of the second capacitor to a second output terminal by a second switch in a second position of the second switch, when a driving polarity signal is in a second logic state, as claimed in claim 18, for reasons similar to those described above with regard to claims 1 and 10.

In addition, it is submitted that Miyazaki fails to teach or suggest a method comprising

Application Number 10/649,557
Amendment dated February 26, 2007
Reply to Office Action of November 30, 2006


connecting one end of a third capacitor to a second output terminal by a third switch in a second position of the third switch, and further fails to teach or suggest connecting the other end of the third capacitor to a third output terminal by a fourth switch in a second position of the fourth switch, when the driving polarity signal is in a second logic state, as claimed in claim 18, for reasons similar to those described above with regard to claims 1 and 10.

For these reasons, it is submitted that Miyazaki fails to teach or suggest the present invention, as claimed. Reconsideration and removal of the rejection of claims 1 and 3-20 under 35 U.S.C. 102(e) based on Miyazaki are respectfully requested.

In view of the amendments to the claims and the foregoing remarks, it is believed that all claims pending in the application are in condition for allowance, and such allowance is respectfully solicited. If a telephone conference will expedite prosecution of the application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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